

Case No.: MEDTR-001A
Certificate of Mailing:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Matthew J. Birdsall)	Art Unit 3731
)	
Serial No.: 10/029,553)	
)	Examiner: Michael Thaler
Filed: December 20, 2001)	
)	
For: Profiled Stent and Method of Manufacture)	

DECLARATION OF MATTHEW J. BIRDSALL PURSUANT TO 37 C.F.R. § 1.131

I, Matthew J. Birdsall, do hereby declare as follows:

1. I am an employee of Medtronic Vascular, Inc., the owner by assignment of the above-captioned United States Patent Application Serial No. 10/029,553 on which I am named as the inventor. I have read and am familiar with the content of United States Patent Application Serial No. 10/029,553.

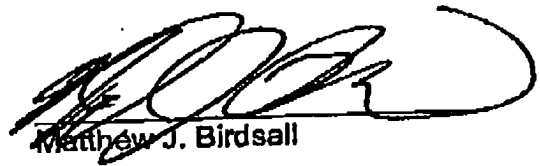
2. Prior to February 14, 1996 I had conceived of and manufactured prototypes of swaged stents as described and claimed in United States Patent Application Serial No. 10/029,553. These prototypes that were made prior to February 14, 1996 comprised a plurality of struts. In transverse cross section, each strut had a substantially flat top side, a substantially flat bottom side and substantially curved left and right sides.

3. Appended hereto as Exhibit A are true and exact copies of two (2) confidential pages from my laboratory notebook which I prepared on January 30, 1996 to document my prior conception and prototyping of the swaged stents as described in Paragraph 2 above.

I declare that all of the statements made herein of my own knowledge are true,

and that all statements made on information and belief are believed to be true, and further that such statements are made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application or and patent issuing therefrom.

11/17/04
Date


Matthew J. Birdsall

DESCRIPTION OF SWAGED SHEET DESCRIBED 1/30/96
 BRIEFLY IN LAB BOOK OF NATHAN TERPES
 HAVING THE
 TO PROVIDE
 TRANSITION
 TO REGION
 TO THE
 EAST
 OBSERVED
 THE
 CHARACTERISTICS

SHEET LIMITED,
 IS MANY OTHER
 - SHEET
 ALSO AS
 OBSERVED.

A TUBULAR-LIKE SHEET COULD BE
 MANUFACTURED BY CRUSHING / SWAGING
 A MICROSTENT LIKE DEVICE POST
 FORMING / WELDING. THIS DEVICE
 HAS BEEN PROVIDED AND VARIOUS
 ITERATIONS TRIED SINCE 1/19/96.

CURRENTLY, THE PROCESS IS AS
 FOLLOWS:

- 1) MANUFACTURE MICROSTENT II (STANDARD)
- 2) CRUSH COMPLETE SHEET
 W/ COLLET TO $\sim .005 \times .011$
 X-SECTION ON MANIPULATOR.
- 3) ANNEAL CRUSHED SHEET & E.P.
- 4) ROLL-DOWN (STANDARD)
- 5) LOAD ON BALLOON
- 6) CRUSH W/ PHIL HARSTAD'S
 FIXTURE
- 7) SHEATH & BARE.

Witnessed & Verified
 by Dennis Brophy
 1/30/96

THIS PROCESS GIVES $\sim .061$ " CROSSING PROFILE
 FOR 4.0 ϕ , $\sim .059$ " FOR 3.5 ϕ
 & $\sim .058$ " FOR 3.0 ϕ .

12/22/95

1/30/96

1/30/96 CONTINUED

ADVANTAGES:

- MANUFACTURABILITY
- RADIAL STRENGTH A
- DECREASED RECOIL
- DECREASED CROSSING PROFILE
- INCREASED SURFACE AREA CONTACT
- DIMINISHED "TWISTING" OVER TIBIAL STEPS SUCH AS JJIS.

Witnessed & Understood
by Dennis Bracher
1/30/96

[Signature] 1/30/96

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